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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/801,119	03/15/2004	Carsten Neumann	NEUMANN C 1	9186

7590
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12/18/2006

EXAMINER

WOODALL, NICHOLAS W

ART UNIT	PAPER NUMBER
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3733

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	12/18/2006	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/801,119

Applicant(s)

NEUMANN, CARSTEN

Examiner

Nicholas Woodall

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-6, 8-10, 14-18 and 23-27 is/are rejected.
- 7) ☒ Claim(s) 7, 11-13, and 19-22 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>See Continuation Sheet</u> . | 6) <input type="checkbox"/> Other: ____ |

Continuation of Attachment(s) 3). Information Disclosure Statement(s) (PTO/SB/08), Paper No(s)/Mail Date :06/21/2004;06/30/2004;08/06/2004.

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter that the applicant regards as his invention.

2. Claim 9 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

3. Claim 9 is indefinite because the claim contains "means for" language without a description in the specification of the details of the means for attachment stated in the claim. Also, claim 9 states, "wherein said joining plate has a means for attachment in duplicate". The examiner is unclear on the limitations set forth by the claim. The examiner believes the claim means there are at least two joining plates with a means for attachment as set forth in the prior claims to be an opening in the joining plate. The claim will be understood as such for examination purposes.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

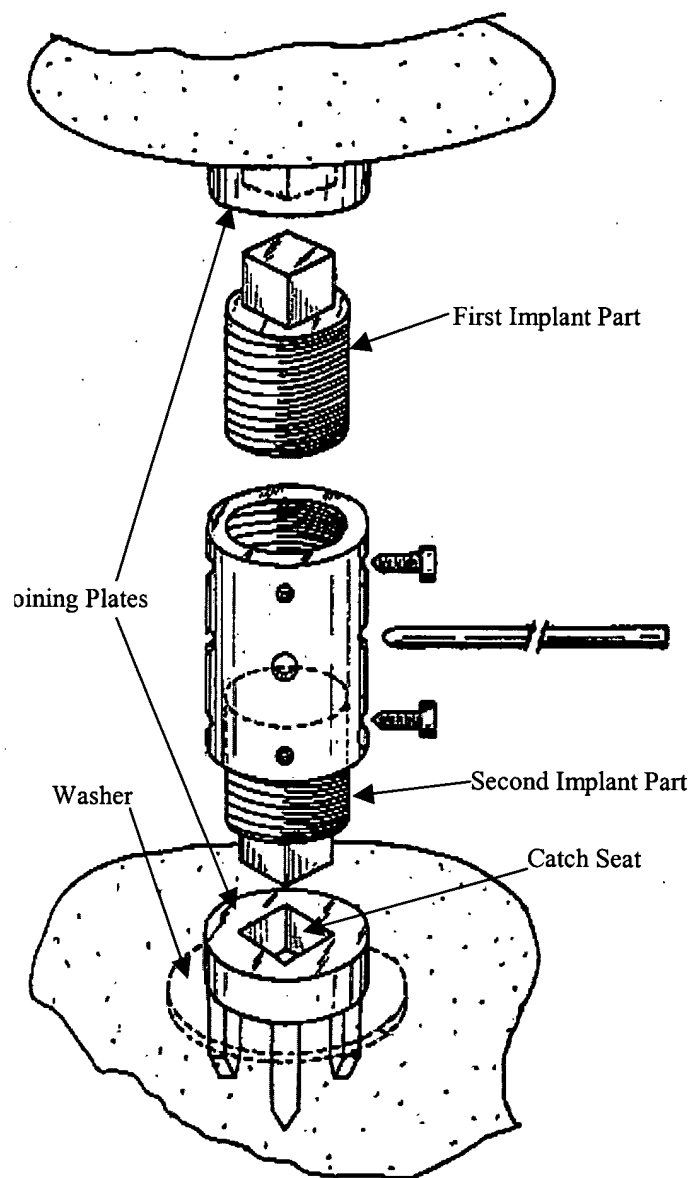
A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-6, 9-10, and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by Daher (U.S. Patent 4,657,550).

Regarding claim 1, Daher discloses a device comprising at least two implant parts and a joining plate. The at least two implant parts are axially adjustable relative to each other. The joining plate is capable of being releasably connected with a free end with at least one of the two implant parts and is substantially perpendicular relative to the longitudinal axis of the implant (see Figure 1 below). Regarding claim 2, Daher discloses a device wherein the joining plate has a thickness that is between 2% and 30% the height of at least one of the two implant parts. Regarding claim 3, Daher discloses a device wherein the joining plate includes a washer that projects beyond the outside contour of the implant parts. Regarding claim 4, Daher discloses a device further comprising a means for releasable attachment of the joining plate wherein the means is an opening formed in the joining plate. Regarding claim 5, Daher discloses a device wherein the shape of the opening in the joining plate is adapted to the outside contour of the implant parts. Regarding claim 6, Daher discloses a device wherein the opening in the joining plate is positioned in the center of gravity of the joining plate. Regarding claim 9, Daher discloses a device wherein there are two joining plates which have a means for attachment that is an opening in the joining plates that are attached to at least one of the implant parts. Regarding claim 10, Daher discloses a device further comprising a catch seat that is part of the plug-in connection that forms the attachment means between the joining plate and at least one of the implant parts. Regarding claim 15, Daher discloses a device wherein the joining plate is circular shaped.

Figure 1

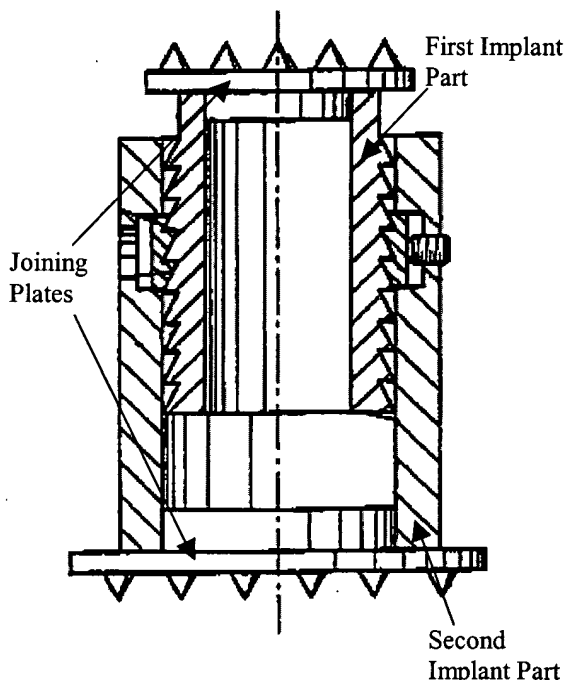


6. Claims 1 and 3 are rejected under 35 U.S.C. 102(b) as being anticipated by Schar (U.S. Patent 6,176,881 B1).

Regarding claim 1, Schar discloses a device comprising at least two implant parts and a joining plate. The at least two implant parts are axially adjustable relative to

each other. The joining plate is capable of being releasably connected with a free end with at least one of the two implant parts and is substantially perpendicular relative to the longitudinal axis of the implant (see Figure 2 below). Regarding claim 3, Schar discloses a device wherein a joining plate projects beyond the outside contour of the implant.

Figure 2



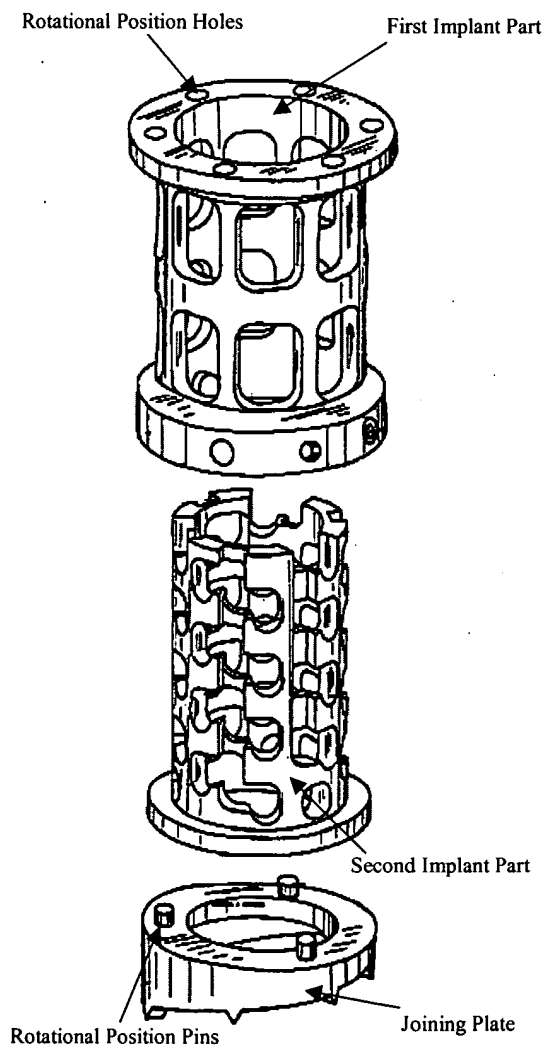
7. Claims 1-2, 23, and 26 are rejected under 35 U.S.C. 102(b) as being anticipated by Studer (U.S. Patent 6,193,756).

Regarding claim 1, Studer discloses a device comprising at least two implant parts and a joining plate. The at least two implant parts are axially adjustable relative to each other. The joining plate is capable of being releasably connected with a free end with at least one of the two implant parts and is substantially perpendicular relative to

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the longitudinal axis of the implant (see Figure 3 below). Regarding claim 2, Studer discloses a device wherein the joining plate has a thickness that is between 2% and 30% the height of at least one of the two implant parts. Regarding claim 23, Studer discloses a device wherein the joining plate has a side that faces the vertebrae and is oriented at an incline to said longitudinal axis. Regarding claim 26, Studer discloses a device wherein the joining plate has a rotational position that can be fixed in place about a longitudinal axis relative to the at least two implant parts.

Figure 3



Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 14 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Daher (U.S. Patent 4,657,550).

Daher discloses the claimed invention except for the joining plate to be formed as a polygon or star-shaped. It would have been an obvious matter of design choice to one skilled in the art at the time the invention was made to construct the joining plate of the device of Daher with a polygonal or star shape, since applicant has not disclosed that such solve any stated problem or is anything more than one of numerous shapes or configurations a person ordinary skill in the art would find obvious for the purpose of forming a joining plate. In re Dailey and Eilers, 149 USPQ 47 (1966).

10. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Schar (U.S. Patent 6,176,881) in view of Boyer (WO 01/070139 A3).

Regarding claim 8, Schar discloses the invention as claimed except for a surface of the joining plate facing the vertebrae to have a convex shape. Boyer teaches a device wherein an endplate has a convex shape surface facing the vertebrae in order to positively engage the surrounding anatomical tissue (page 21 lines 17-21). It would have been obvious to one having ordinary skill in the art at the time the invention was made to manufacture the device of Schar with joining plates having a convex shaped

surface facing the vertebrae in view of Boyer in order to positively engage the surrounding anatomical tissue of the vertebrae.

11. Claims 17 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Studer (U.S. Patent 6,193,756) in view of Paponneau (U.S. Publication 2003/0176925).

Regarding claims 17 and 18, Studer discloses the invention as claimed except for the joining plate comprising a passage opening. Paponneau teaches a device comprising endplates that further includes a plurality of passage opening in order to receive bone growth material and facilitate spinal fusion (paragraph 17). It would have been obvious to one having ordinary skill in the art at the time the invention was made to manufacture the device of Studer with joining plates comprising a plurality of passage openings in view of Paponneau in order to receive bone growth material and facilitate spinal fusion.

12. Claims 24 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schar (U.S. Patent 6,176,881) in view of Paponneau (U.S. Publication 2003/0176925).

Regarding claims 24 and 25, Schar discloses the invention as claimed except for the joining plate having a surface facing the implant parts that is at an angle with respect to the longitudinal axis of the implant parts. Paponneau teaches a device with pivotal endplates that allow the surface facing the implant to have an angle with respect to the longitudinal axis of between 5 and 25 degrees (page 2 paragraph 12) in order to prevent the need for additional parts such as locking screws (pages 3 and 4 paragraph

39). It would have been obvious to one having ordinary skill in the art at the time the invention was made to manufacture the device of Schar with joining plates that can pivot at an angle with respect to the longitudinal axis of the implant in view of Paponneau in order to prevent the need for additional parts such as locking screws.

13. Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over Studer (U.S. Patent 6,193,756).

Regarding claim 27, Studer discloses the invention as claimed except for the plurality of catch seats between the joining plate and the at least two implant parts in a circumferential direction be between 10 and 45 degrees intervals. Studer discloses the catch seats to be at 120 degrees intervals. It would have been obvious to one having ordinary skill in the art at the time the invention was made to construct the catch seats in the device of Studer at intervals between 10 and 45 degrees, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. In re Aller, 105 USPQ 233.

Allowable Subject Matter

14. Claims 7, 19, 20, 21, and 22 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

15. Claims 10-13 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Conclusion

16. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See PTO-892 for cited references the examiner felt were relevant to the application.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nicholas Woodall whose telephone number is 571-272-5204. The examiner can normally be reached on Monday to Friday 8:00 to 5:30 EST..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eduardo Robert can be reached on 571-272-4719. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

NWW



EDUARDO C. ROBERT
SUPERVISORY PATENT EXAMINER